Amendments to the Drawings

The attached Replacement Drawing Sheets containing Figs. 12, 19, and 22 replace the originally-filed drawing sheet containing Figs. 12, 19, and 22 of this Application. Annotated Drawing Sheets containing marked-up version of the amended Figs. 12, 19, and 22 are also attached.

Remarks

Prior to this Amendment, Claims 1-45 were pending in the present application. By this Amendment, Applicant has amended Claims 1, 3-5, 10, 16-17, 19, 23, 27, 30, 32-35, 38, 39, 42-43, and 45. No new matter was added by this Amendment. Reexamination and reconsideration in view of the amendments and remarks contained herein are respectfully requested.

I. Objections to the Drawings

The drawings stand objected to due to informalities identified by the Examiner. Applicant has amended the identified informalities and corrected drawings sheets have been provided with this Amendment.

II. Information Disclosure Statement

The Examiner has asserted that the information disclosure statement filed on July 19, 2004 fails to comply with the provisions of 37 CFR § 1.97 and § 1.98 and MPEP § 609 because a number of references listed in "Other Prior Art" on Form 1449B fail to list the date the reference was published. In response to the Examiner's assertion, Applicant mailed a supplemental information disclosure statement under 37 CFR 1.97(c)(2) and the corresponding fee as required under 37 CFR § 1.17(p) on June 2, 2006, which was received and entered by the U.S. Patent and Trademark Office on June 6, 2006. The supplemental information disclosure statement lists each reference previously missing a publication date. As such, the supplemental information disclosure statement complies with the provisions of 37 CFR § 1.97 and § 1.98 and MPEP § 609 and the information referred to therein should be considered.

III. Claim Rejections - 35 U.S.C. § 112

Claims 19-26 and 34 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, Claims 19-26 and 34 stand rejected under 35 U.S.C. § 112 for failing to disclose either open-ended or closed-ended claim language. Applicant has amended Claims 19 and 34 to include open-ended claim language. As such, the Examiner's rejection to Claims 19 and 34 and Claims 20-26 that depend on Claim 19 is overcome.

IV. Claim Rejections - 35 U.S.C. § 103(a)

A. Claims 19-23, 27, 30-32, 34-36, 38-40, and 42-45

Claims 19-23, 27, 30-32, 34-36, 38-40, and 42-45 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,006,242 issued to Poole et al. (hereinafter referred to as "Poole"). As discussed below in more detail, Poole does not teach or suggest the subject matter defined by these claims.

i. Independent Claim 19

Amended independent Claim 19 recites:

A computer readable medium containing instructions for generating a document, the instructions comprising:

acquiring data from an origination platform;

interacting with a knowledge base to create a listing of a first set of documents;

modifying the listing of the first set of documents based on user input; validating data acquired from the origination platform; and

interacting with a knowledge base and applying precedence and rules to document content to create a second set of documents based on the data and the listing of the first set of documents.

According to the Office, Poole teaches acquiring data from an origination platform, interacting with a knowledge base and applying precedence and rules to create a first set of documents, modifying a set of documents based on user input, and validating data acquired from the origination platform. The Office recognizes that Poole does not teach interacting with a knowledge base and applying precedence and rules to create a second set of documents. However, the Office asserts that "it was well-known to one of ordinary skill in the art to create another set of documents given the knowledge of how to create a first set, because it would have [been] obvious to one of ordinary skill in the art at the time of Applicant's invention that a method of creating a dynamic documents [sic] may be replicated to gain repeated benefit of flexibility of using one method when creating documents" (Office action dated April 18, 2006, pages 12-13).

It appears that the Office is asserting that it would be obvious to reuse the document generation method in order to create a second set of documents during a subsequent, distinct transaction or execution of the instructions. For example, based on the Office's assertion, the

first set of documents could include a set of loan documents requested by a first entity in a first transaction and the second set of documents could include a set of account opening documents requested by a second entity in a second, distinct transaction. Applicant asserts that he is not attempting to claim the general reusability of computer software, but is claiming that the "first set of documents" and the "second set of documents" are two sets of documents associated with a single transaction. To clarify this distinction, however, Applicant has amended Claim 19 to indicate that the "second set of documents" is created based on the "first set of documents." Thus, to the extent there was any doubt before, it is clear that "creating a second set of documents" is performed within a single transaction of generating a document and is not simply the re-execution of instructions stored in the computer-readable medium.

In addition, Poole does not teach or suggest "interacting with a knowledge base and applying precedence and rules to document content to create a second set of documents based on the listing of the first set of documents," as recited in amended Claim 19 (emphasis added). In contrast, Poole discloses receiving "content that is to be included in a document in order to meet the objectives of the parties to a transaction, and to meet certain business, legal, and/or governmental rules and regulations [from a document developer]" (col. 5, lines 3-7). "Each of the constituent portions of the document is associated with an entity reference which is selected by the document developer" (col. 5, lines 7-10).

In particular, as disclosed in Poole, after the document developer selects the appropriate entity references, "each of the entity reference [sic] associated with the document is resolved. A stream 40 of resolved entities or components is produced at step 38 at the conclusion of, or, alternatively, during the entity reference resolution process" (col. 5, lines 10-14). After a "document developer authors a document instance and associates entity references with the document instance...an entity reference is read from the document at step 123. One or more catalogs are searched at step 125 in order to match the entity reference with a corresponding entity identifier stored in a catalog. It is noted that more than one entity identifier and corresponding resolution strategy may be stored in one or more of the catalogs. It is desirable that the resolution strategy of the first matching entity identifier in a catalog be executed" (col. 6, lines 52-63).

Clearly, Poole teaches attempting to match an entity reference specified by a document developer with an entity identifier in a catalog. When one or more catalogs include identical entity identifiers, the only resolution strategy disclosed in Poole includes using the first matching entity identifier. Even assuming for the sake of argument that using the first matching entity identifier encountered by the system is a form of applying precedence, Poole only discloses "applying precedence" to entity references specified by a document developer. Poole does not teach or suggest "applying precedence" to document content as specified in amended Claim 19. Furthermore, since Poole does not teach or suggest generating a listing of documents or modifying the listing of documents, Poole clearly does not teach or suggest generating a set of documents or document components based on a listing of documents.

Therefore, Poole does not teach or suggest "interacting with a knowledge base and applying precedence and rules to document content to create a second set of documents based on the listing of the first set of documents," as recited in amended Claim 19. Accordingly, for at least the reasons set out above, independent Claim 19 is allowable and dependent Claims 20-26, which depend from independent Claim 19, are also allowable.

Similar rationale can be applied to independent Claims 27, 34, 35, 39, and 43, as amended, and the claims that depend on Claims 27, 34, 35, 39, and 43. Therefore, Claims 27-33, 34, 35-38, 39-42, and 43-45 are allowable for the at least one or more of the reasons set forth above with respect to Claim 19.

B. Claims 1-9, 13-18, 24, 28-29, 37, and 41

Claims 1-9, 13-18, 24, 28-29, 37, and 41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Poole in further view of U.S. Published Patent Application No. 2003/0163809 assigned to Bantz et al. (hereinafter referred to as "Bantz"). As discussed below in more detail, Poole and Bantz, taken alone or in combination, do not teach or suggest the subject matter defined by these claims.

i. Independent Claim 1

Amended independent Claim 1 recites:

A document generation system comprising:

an assembly facility configured to apply precedence and rules to document content and to be coupled to an origination platform;

a knowledge base configured to be coupled to the assembly facility and to store content in a hierarchy; and

a content management system configured to be coupled to the knowledge base and to support authoring of document content and rules.

As described above with respect to Claim 19, Poole does not disclose applying precedence and rules to <u>document content</u>. Therefore, Poole does not teach or suggest "an assembly facility configured to apply precedence and rules to document content...," as recited in amended Claim 1.

Bantz does not cure the deficiencies of Poole. Bantz discloses "a method, computer program product, and data processing system for providing automatic, mass-customized preparation of disk images" (abstract). In particular, Bantz discloses providing a "graphical user interface [that] allows the customer to choose among alternative software components to customize the disk image for his or her needs" (paragraph 21, lines 6-8). After the customer provides customer requirements, a "[p]rovisioning engine server 90 retrieves customer requirements...[and] consults knowledge bases 91, 92, and 93 to provide context for the analysis of customer requirements, and transmits a series of provisioning orders...to disk image manufacturing server 110 which will store them on disk 111" (paragraph 29, lines 1-7).

As disclosed in Bantz, "[d]isk image manufacturing server 110 creates disk images on disks 120, 121 and 122 in a manner responsive to the provisioning orders stored on disk 111 and to a knowledge base 112. Knowledge base 112 contains rules pertaining to the construction of disk images in general, as opposed to the knowledge bases 91, 92 and 93, which determine which components of software are to be included in the disk image" (paragraph 31, lines 1-8).

As disclosed in Bantz, rules "that may be found in knowledge base 92" can include ifthen rules that specify which software should be chosen for the customer (paragraph 32, lines 1-7 and FIG. 3). Similarly, "rules that may be found in knowledge 112, pertaining to the construction of disk images in general...specify where (in what subdirectory) and with what installation options the...software is to be generated into the disk image" (paragraph 34, lines 1-5). Clearly, Bantz discloses applying rules from one or more knowledge bases to customer requirements in order to determine software and associated software options to be provided to a customer. However, Bantz makes no mention whatsoever of applying rules to document content or applying precedence to document content. Moreover, Bantz makes no mention of applying precedence to customer requirements, rules, or software options. In general, Bantz does not discuss customizing rules or software options for a particular customer such that specific rules or software are applied over default rules or software for specific customers.

Therefore, Bantz does not teach or suggest "an assembly facility configured to apply precedence and rules to document content...," as recited in amended Claim 1. Accordingly, for at least the reasons set out above, independent Claim 1 is allowable and dependent Claims 2-18, which depend from independent Claim 19, are also allowable.

ii. Dependent Claims 24, 28-29, 37, and 41

Dependent Claims 24, 28-29, 37, and 41 depend from independent Claims 19, 27, 35, and 39 respectively and, therefore, are allowable for at least the reasons set forth above with respect to Claim 19. Nonetheless, Applicant provides additional explanation regarding the allowability of these claims.

As noted, Poole does not teach or suggest applying precedence and rules to document content to create a set of documents. Bantz does not cure any of the deficiencies of Poole. As described above with respect to Claim 1, Bantz does not teach or suggest applying precedence and rules to document content. In contrast, Bantz merely discloses applying rules from one or more knowledge bases to customer requirements in order to determine software and associated software options to be provided to a customer and makes no mention whatsoever of applying rules to document content or applying precedence to document content. Therefore, Claims 24, 28-29, 37, and 41 are allowable for at least the additional reasons set forth above.

C. Claims 10-12 and 25-26

Claims 10-12 and 25-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Poole in further view of U.S. Patent No. 5,630,127 issued to Moore et al. (hereinafter referred to as "Moore"). Claims 10-12 and 25-26 depend from independent Claims 1 and 19 respectively and, therefore, are allowable for at least the reasons set forth above with respect to Claims 1 and 19. Nonetheless, Applicant provides additional explanation regarding the allowability of these claims.

As noted, Poole does not teach or suggest applying precedence and rules to document content to create a set of documents. Moore does not cure the deficiencies of Poole. Moore discloses a "rule-based application structure [that] utilizes rules which are stored separately from

application programs. The rules are stored in a relational database as objects. A user can modify existing rules and create new rules which are then restored in the database... Because the rules are separate from the application programs, modifications to the rules are easier to accomplish" (abstract). As further disclosed in Moore, "[r]ules...will be stored as objects in the database" (col. 4, line 54). During execution, an "application program executes individual rules by locating the object table of the rule stored in the database and then processing that table. The rules are located in the same manner as other data objects stored in the data base. The application program indexes the table based on the rule name" (col. 11, lines 17-22).

Clearly, among other items, Moore does not teach or suggest generating documents. In addition, Moore does not teach or suggest applying precedence and rules to document content. In particular, Moore does not teach or suggest applying precedence to rules. In fact, Moore actually teaches away from using precedence with rules since Moore states the rules included in the system are indexed or uniquely identified by the rule's name. As described in the present application, when using the precedence concept, an object that is overridden to create a new customized object, "the new object retains the same name as its precedence parent" (paragraph 68). Clearly precedence, as used in the present application, applies a customized component having the same name or identifier of a default component, when appropriate, rather than the default component. Therefore, the fact that rules included in the Moore system are indexed within a table based on the rule's name or identifier, teaches away from applying precedence with respect to rules.

Accordingly, Claims 10-12 and 25-26 are allowable for at least the additional reasons set forth above.

D. Claim 33

Claim 33 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Poole in further view of U.S. Published Patent Application No. 2004/0250059 assigned to Ramelson et al. (hereinafter referred to as "Ramelson"). Claim 33 depends from independent Claim 27 and is allowable for at least the reasons set forth above with respect to Claim 19. Nonetheless, Applicant provides additional explanation regarding the allowability of this claim.

As noted, Poole does not teach or suggest applying precedence and rules to document content to create a set of documents. Ramelson does not cure the deficiencies of Poole.

Ramelson discloses "a networked system...[that] includes an Object-Aware Switch (OAS) 10 to which one or more clients C1-CN are operatively connected via a transport-layer protocol, such as TCP. One or more servers S1-SN are also operatively connected to the OAS via a transport-layer protocol, which can also be TCP" (paragraph 61, lines 1-7).

As described in Ramelson, the OAS can include "a load-balancing functional module...[that] inspects inbound network packets and makes forwarding decisions based on embedded content (terminated TCP) or the TCP packet header (non-terminated TCP)" (paragraph 70, lines 1-5). In particular, the OAS "applies one or more object rules and policies (such as levels of service, HTTP headers, and cookies) and a load balancing algorithm before forwarding the packets to their Web server destinations" (paragraph 70, lines 5-10). As described in Ramelson, "[a]s the load balancer receives requests from the client, it attempts to match expressions in its object rules against the HTTP request" (paragraph 110, lines 2-4). "If the application switch is able to match an HTTP request, an action is taken. If the rule does not match, the switch moves to the next rule in order of precedence until a match is found or until the switch evaluates all rules. If the switch cannot determine a match, or if there are no remaining rules, the switch drops the request and sends a warning stating that no policy matches were found" (paragraphs 111). Each rule object is assigned a precedence by a forwarding policy, "which defines the order in which rules are evaluated" (paragraph 132, lines 1-3).

Although Ramelson discloses applying precedence to <u>rules</u> in order to specify an order for applying rules, Ramelson does not teach or suggest applying precedence to document content, as recited in amended Claim 27. Furthermore, the precedence disclosed in Ramelson is different than the precedence concept used in the present application. In the present application, precedence describes the process of applying specific or customized document content <u>rather than</u> default content. The precedence concept used in the present application only applies or chooses the single, most applicable form of document content and does not choose or apply multiple forms of document content. Therefore, the precedence concept as used in the present application does not involve specifying an order for applying elements but rather involves specifying a rank or importance among elements that is used to select a single component. As a result, Ramelson does not teach or suggest applying precedence, as described in the present application, and, in particular, does not teach or suggest applying precedence to document content, as claimed.

In addition, there is no motivation to combine the teachings of Poole with the teachings of Ramelson. Poole discloses a document creation system and Ramelson discloses a secure network processing. Poole makes no mention whatsoever of a desire or need to provide document creation over a network with security features and, in particular, makes no mention whatsoever of providing document creation over a network that includes a switch configured to provide load-balancing. Similarly, Ramelson makes no mention whatsoever of using the networked system to provide document generation. Clearly, the teachings of Poole and the teachings of Ramelson are in completely separate fields of invention.

The Office asserts that it "would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's with Phillips et al's [sic] method since it would have provided the benefit of better maintainability and customability [sic] for enabling users to set [the] order of objects" (Office action dated April 18, 2006, page 17). Since the precedence concept applied in the present application does not involve setting an order to elements but involves setting overriding rank between elements, it would not have been obvious to combine the teachings of Poole with the teachings of Ramelson.

Consequently, Claim 33 is allowable for at least the additional reasons set forth above.

V. Conclusion

In light of the above, Applicant believes that the application is in condition for allowance and respectfully requests that a timely Notice of Allowance be issued in this case. Applicant also requests that the Examiner telephone the attorneys of record in the event a telephone discussion would be helpful in advancing the prosecution of the present application.

Respectfully submitted.

Derek C. Stettner Reg. No. 37,945

File No. 014586-9009-02 Michael Best & Friedrich LLP 100 East Wisconsin Avenue Suite 3300 Milwaukee, Wisconsin 53202-4108 414.271.6560

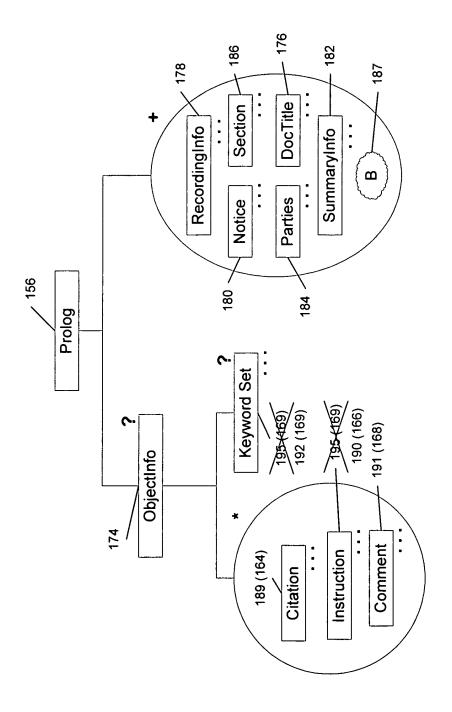


Fig. 12

Fig. 22

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FIG. 19